

GP-301710

METHOD OF INCORPORATING BROMINATED COMPOUNDS AS
ADDITIVES TO EXPANDED POLYSTYRENE MOLDED PATTERNS
FOR USE IN LOST FOAM ALUMINUM CASTING

ABSTRACT OF THE DISCLOSURE

A process including topically applying a finely divided powder onto a plurality of polystyrene beads. The finely divided powder includes brominated compounds including a brominated alkane having at least one

5 substituent aromatic group. The polystyrene beads are pre-expanded with the topically applied brominated compounds and a molded pattern is formed from the pre-expanded polystyrene beads. A lost foam casting mold is formed with the molded pattern. Molten metal is poured into the lost foam casting mold and onto the molded pattern to depolymerize the polystyrene beads with the

10 topically applied brominated compounds.